

Intelligent Sensor Network

Develop a simulation environment in which a map is shown and on it the location of a number of sensors. An XML script simulates sensor values that also need to be shown on the map. In addition to the simulated sensors some real sensors are used in the simulator.

It is known that during large disasters, rescue workers have difficulty sharing the most recent information. Fire fighters might enter a building of which police officials know that there are no people inside any more. With massive evacuations ambulance people may sometimes send people in a direction where a lot of congestion is present without knowing this.

This project aims to use a variety of intelligent sensors in an agent-based system to collect and share as much information as possible. A simulator is used to display the various sensor values on a map. All sensors provide a GPS coordinate that is used to indicate the sensor's position on the map. A model disaster scenario is used to describe the various events during the disaster in order to provide a clear picture of what is happening.

In this project a first approximation of such a simulator is built and demonstrated, partly using earlier work. It forms the basis for a more extensive project that will be using the simulator.

By Peter van Lith – 22 Dec 2004

For additional questions and available documentation, please Peter van Lith, peter@lithp.nl. For some backgrounds look at www.multimotions.com